

CLAIMS

1. Hydrodynamic torque converter with a pump impeller (2) that can be driven by a drive motor, by means of which a turbine rotor (3) can be driven, the rotor being connected with a drive input shaft of a transmission (4), and with a torque measurement device (7), characterized in that between the pump impeller (2) and the drive motor is arranged a clutch (8) which connects the drive motor to the pump impeller (2), and the turbine rotor (3) is connected to the torque measurement device (7).

2. Hydrodynamic torque converter according to claim 1, characterized in that the clutch (8) can be operated in a slipping condition.

3. Hydrodynamic torque converter according to claim 1, characterized in that an actuation condition of the clutch (8) is controlled or regulated as a function of the torque determined by the torque measurement device (7).

4. Hydrodynamic torque converter according to claim 1, characterized in that the torque measurement device (7) is fitted directly on or in the turbine rotor (3).

5. Hydrodynamic torque converter according to claim 1, characterized in that the torque measurement device (7) is fitted directly on or in a shaft (4) which is connected with the turbine rotor (3) and forms a drive input shaft for a transmission.

6. Hydrodynamic torque converter with a pump impeller (2) that can be driven by a drive motor, by means of which a turbine rotor (3) can be driven, which is connected to the drive input shaft (4) of a transmission, and with a torque measurement device (7), characterized in that between the turbine rotor (3) and the drive motor is arranged a clutch (5) which connects the drive motor to the turbine rotor (3), and the turbine rotor (3) is connected to the torque measurement device (7).

7. Hydrodynamic torque converter according to claim 6, characterized in that the clutch (5) can be operated in a slipping condition.

8. Hydrodynamic torque converter according to claim 6, characterized in that an actuation condition of the clutch (5) is controlled or regulated as a function of the torque determined by the torque measurement device (7).

9. Hydrodynamic torque converter according to claim 6, characterized in that the torque measurement device is fitted directly on or in the turbine rotor.

10. Hydrodynamic torque converter according to claim 6, characterized in that the torque measurement device (7) is fitted on a drive output shaft (4) which is connected with the turbine rotor.

11. Hydrodynamic torque converter according to claims 1 or 6, characterized in that the torque measurement device is made as a magnetic torque measurement device of the type described in WO 01/96826 A2.